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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,315	02/16/2001	Tacyoung Yoon	49563-1 (72021)	7054

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EXAMINER
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LIU, HONG

ART UNIT	PAPER NUMBER
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1624

DATE MAILED: 09/24/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/788,315

Applicant(s)

YOON ET AL.

Examiner

Hong Liu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-26, 30, 42-130, 133-146, 154, 155 and 162 is/are pending in the application.
- 4a) Of the above claim(s) 16-26, 30, 42-130, 133-146, 154, 155 and 162 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 3-26, 30, 42-130, 133-146, 154-155, and 162 are pending in this application.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 11, 2003 has been entered.

### **Response to Arguments**

Applicants' arguments filed on August 11, 2003 have been fully considered and are found persuasive. Since applicants' amendment overcame the 102(b) rejection of the compounds where R2 is amino, the prior art search was expanded to compounds where R2 is a substituted amino.

Applicants are advised of MPEP 803.02, Restriction -Markush Claims[R-2], forth paragraph, where is stated;

"As an example, in the case of an application with a Markush -type claims drawn to the compound C-R, wherein R is a radical selected from the group consisting of A, B, C, D, and E, the examiner may require a provisional election of a single species, CA, CB, CC, CD, or CE. The Markush-type claim would then be examined fully with respect to the elected species and any species and any species considered to be clearly unpatentable over the elected species. If on examination the elected species is found to be anticipated or rendered obvious by prior art, the

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Markush-type claim and claims to the elected species shall be rejected, and claims to the non-elected species would be held withdrawn from further consideration. As in the prevailing practice, **a second action on the rejected claims would be made final.**" (Emphasis added). Because the amended claims are still anticipated by prior art, the claims are finally rejected.

Claims 16-26, 30, 42-146, 154, 155, and 162 are withdrawn from prior art consideration because art was found (see MPEP 803.02).

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Election/Restrictions***

The amended claims are object to as they still contain the non-elected subject matter which was withdrawn from consideration in the previous office action. The claims should be limited to the scope of the elected group, namely, Ar is phenyl or naphthalene.

#### ***Claim Rejections - 35 USC § 102***

The rejection to claims under 35 U.S.C., 102(b) is hereby withdrawn in view of applicant's amendment, which excluded the species of CN from the definition of R2 and the argument that the substituents of R<sub>A</sub> do not include alkyl groups substituted with carboxylic acid.

Claims 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hori et al., Chem. Abstract 80:890. The instantly claimed compounds read on the reference compound, see the enclosed copy of CAPLUS computer search report and the compounds.

Claims 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miesel et al., Chem Abstract 96: 35307. The instantly claimed compounds read on the reference compound,

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see the enclosed copy of CAPLUS computer search report and the compounds having RN 59489-79-1, 59489-82-6, 69816-4 and other compounds wherein R3 is not hydrogen.

Claims 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnett et al. (US Patent 4211870). Barnett teaches the compounds of the instant invention (see Examples 7, 9, and 10).

The last two rejections can also be found in the Office action dated November 13, 2002.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


Claims 3-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. (WO 98/38174). The reference teaches a generic group of compounds which embraces applicant's instantly claimed compounds. See formula I, page 1 wherein R1 is substituted phenyl or naphthyl, R3 is NRbRc, R2 is NH2 or NHC(O)Ra, and R4 can be functional groups other than hydrogen, etc. The compounds are taught to be useful as pharmaceutical agents. Although the prepared reference compounds are excluded from the genus of the instant claims by the provisos, the instantly claimed compounds are nevertheless embraced by the generic teaching of the reference. Therefore, it would have been obvious to one skilled in the art at the time of the invention to select any of the species of the genus taught by the reference including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the specie of the genus would have similar properties and, thus, the same use as taught for the

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genus as a whole. One of ordinary skill in the art would have been motivated to select the claimed compounds from the genus in the reference since such compounds would have been suggested by the reference as a whole. It has been held that a prior art disclosed genus of useful compounds is sufficient to render prima facie obvious a species falling within a genus. See *In re Susi*, 440 F.2d 442, 169 USPQ 423, 425 (CCPA 1971), followed by the Federal Circuit in *Merck & Co. V. Biocraft Laboratories*, 847 F.2d 804, 10 USPQ 2d 1843, 1846 (Fed. Cir. 1989).

Any inquiry concerning this communication should be directed to Examiner Hong Liu whose telephone number is (703) 306-5814. The examiner can normally be reached on Monday through Friday from 8:30 AM to 6:00 PM. If attempts to reach the examiner by the phone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached at (703) 308-4716. The fax phone number for this group is (703) 308-4734 for "unofficial" purposes and the actual number for official business is (703) 308-4556. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose number is (703) 308-1235.

hl  
September 19, 2003

  
Mukund Shah  
Supervisory Patent Examiner  
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